


EASA	PROPOSED AIRWORTHINESS DIRECTIVE	
	<p>PAD No : 07-161</p> <p>Date: 31 August 2007</p>	
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.		
Type Approval Holder's Name :		Type/Model designation(s) :
Empresa Brasileira de Aeronáutica S.A.		EMB-135 (except -135BJ) and EMB-145 series
TCDS Number: EASA IM.A.032; ANAC (Brazil) EA-9606		
Foreign AD: This AD is related to, and prompted by NPR/AD Nr. 2007-145-09.		
Supersedure: For aircraft that operate under EU Regulations, the requirements of this AD take precedence over those contained in ANAC AD 2007-XX-XX [TBD]		
ATA 28	Fuel System - Fuel Tank System Airworthiness Limitations (AWL) - Implementation	
Manufacturer(s):	Empresa Brasileira de Aeronáutica, S.A. (EMBRAER)	
Applicability:	<p>Model EMB-145, EMB-145EP, EMB-145ER, EMB-145EU, EMB-145LR, EMB-145LU, EMB-145MK, EMB-145MP, EMB-145XR, EMB-135ER, EMB-135LR, aircraft, all serial numbers.</p> <p>Note: Because the Models EMB-135KE, EMB-135KL and EMB-145MR have not been validated in Europe at this time, no aircraft operated under EU regulations and/or registered in EU Member States are affected. For that reason, this AD cannot be applied to those aircraft.</p>	
Reason:	<p>The Agência Nacional de Aviação Civil (ANAC) proposes to adopt a new airworthiness directive (AD) for all Embraer Model EMB-135 and EMB-145 series aircraft. This proposed AD would require revising the approved maintenance plan by incorporating new airworthiness limitations (AWLs) for fuel tank systems to satisfy the RBHA-E88 (equivalent to FAA SFAR-88) requirements. This proposed AD would also require the initial inspection of certain repetitive AWL inspections to phase in those inspections, and repair if necessary. This proposed AD results from a design review of the fuel tank systems. ANAC is proposing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapours, could result in a fuel tank explosion and consequent loss of the airplane.</p> <p>ANAC NPR/AD Nr. 2007-145-09 (copy attached) proposes to mandate the Fuel System Limitation Items, including the Critical Design Configuration Control Limitations (CDCCL), for EMB-135 and EMB-145 series aircraft with a final compliance time of 60 days after the effective date. However, Embraer has</p>	

	<p>voluntarily anticipated and respected the “EASA policy statement on the process for developing instructions for maintenance and inspection of fuel tank ignition source prevention” [EASA D 2005/CPRO, later revised EASA D 2006/CPRO, 8 March 2006] by publishing the Fuel System Limitation Items in Embraer Maintenance Review Board Report (MRBR), Document No. MRB-145/1150 Revision 10, dated 04 August 2006.</p> <p>The EASA compliance time schedule is considered to be a straightforward application of Regulation (EC) No 2042/2003 Part M.A.302 in relation to the publication of the Airworthiness Limitations (including CDCCL) by Embraer in document No. MRB-145/1150. According to Part M.A.302(f) and (g), operators should have been aware of these Fuel Airworthiness Limitations as published by Embraer and implemented these into their aircraft maintenance programme as a result of the required annual review.</p> <p>With this EASA AD, EASA endorses the technical content of the ANAC AD 2007-XX-XX [TBD].</p> <p>However, in deviation from the ANAC AD, EASA requires the incorporation of the relevant tasks into the aircraft maintenance programme before 01 December 2007. Particular attention is requested with regard to Compliance paragraph (b) in the ANAC Airworthiness Directive, since threshold inspections and grace periods might not have been provided in early publications of Embraer document No. MRB-145/1150.</p>
Effective Date:	[TBD: 14 days after final AD issue date]
Compliance:	<p>EASA endorses the technical content of ANAC AD 2007-XX-XX [TBD; currently NPR/AD No. 2007-145-09], which is attached as an appendix to this directive, except regarding paragraphs (a) and (c) of that document, which must be applied as follows:</p> <p>(a) Before 01 December 2007, revise the approved maintenance program to incorporate the tasks presented in the Appendix 2, Section A2.5.2: Fuel System Limitation Items, as shown in the MRB-145/1150 Revision 10, dated 04 Aug. 2006;</p> <p>(c) Before 01 December 2007, revise the approved maintenance program to incorporate items 1), 2) and 3) of the Appendix 2, Section A2.4: Critical Design Configuration Control Limitations (CDCCL), as shown in the MRB-145/1150 Revision 10, dated 04 Aug. 2006;</p> <p>Accomplishing the revision in accordance with a later revision of Embraer document No. MRB-145/1150 is an acceptable method of compliance if the revision is approved by EASA directly or through Agency Decision 2004/03/CF by ANAC (formerly identified as DAC/CTA).</p>
Ref. Publications:	Embraer Maintenance Review Board Report (MRBR), Document No. MRB-145/1150 Revision 10, dated 04 August 2006.
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance for this AD. 2. The closing date for comments is 28 September 2007. 3. Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu . 4. For any question concerning the technical content of the requirements in this AD, please contact: Embraer – Empresa Brasileira de Aeronáutica S.A., Technical Publications, Av. Brig. Faria Lima, 2170. São José Dos Campos - SP - 12227-901 Brasil ; Fax: ++ 55 12 3927-7546 e-mail: distrib@embraer.com.br

**NOTICE OF PROPOSED REGULATION
BRAZILIAN AIRWORTHINESS DIRECTIVES**

REPÚBLICA FEDERATIVA DO BRASIL
AGÊNCIA NACIONAL DE AVIAÇÃO CIVIL – ANAC
Gerência-Geral de Certificação de Produtos Aeronáuticos

Reference: NPR/AD 2007-145-09

Date: 29 June 2007

In accordance with the provisions of RBHA 11, The Aeronautical Products Certification Branch (GGCP) is proposing the issuance of a Brazilian Airworthiness Directive applicable to the aeronautical product referred below.

*All the persons interested may send their comments until the date specified in item 2, indicating the **Reference** above, to the following address or fax-number:*

*National Civil Aviation Agency (ANAC) - Aeronautical Products Certification Branch (GGCP)
Av. Cassiano Ricardo, 521, Bloco B, 2º andar, Parque Residencial Aquarius
12246-870 – São José dos Campos - SP - Brazil - Fax: 55 (12) 3797-2330 - E-mail: pds@anac.gov.br*

1. Proposer: Engineering Branch of Aeronautical Products Certification Branch.

2. Comments: Must be received until 29 July 2007.

APPLICABILITY: *This Airworthiness Directive is applicable to Embraer EMB-145, EMB-145ER, EMB-145EU, EMB-145EP, EMB-145LR, EMB-145LU, EMB-145MR, EMB-145MP, EMB-145MK, EMB-145XR, EMB-135ER, EMB-135LR, EMB-135KE and EMB-135KL aircraft models in operation.*

CANCELLATION / REVISION: *Not applicable.*

REASON: *It has been found that the operators approved maintenance plan to the Embraer aircraft models above listed do not fully comply with the Critical Design Configuration Control Limitations (CDCCL) and with the Fuel System Limitations (FSL), both from Maintenance Review Board Report (MRBR), document No. MRB-145/1150 Revision 10, dated 04 Aug. 2006. These limitations are necessary to preclude ignition sources in the fuel system, as required by RBHA-E88 / SFAR-88.*

Since this condition affects flight safety, a corrective action is required. Thus, sufficient reason exists to request compliance with this AD in the indicated time limit.

REQUIRED ACTION: *Up-to-dating of the aircraft approved maintenance plan according to the MRBR.*

COMPLIANCE: *Required as indicated below, unless already accomplished.*

- (a) Within the next 60 days after the effective date of this AD, alter the aircraft approved maintenance plan to include the tasks presented in the Appendix 2, Section A2.5.2: Fuel System Limitation Items, as shown in the MRB-145/1150 Revision 10, dated 04 Aug. 2006, or further revisions approved by ANAC, with the intervals stated in that document.*
- (b) Within the next 4000 flight hours or 48 months after the effective date of this AD, whichever occurs first, carry out the functional checks (FNC) and detailed visual inspections (DET) required by the tasks presented in the Appendix 2, Section A2.5.2: Fuel System Limitation Items, as shown in the MRB-145/1150 Revision 10, dated 04 Aug. 2006, or further revisions approved by ANAC.*
- (c) Within the next 60 days after the effective date of this AD, alter the aircraft approved maintenance plan to include items 1), 2) and 3) of the Appendix 2, Section A2.4: Critical Design Configuration Control Limitations (CDCCL), as shown in the MRB-145/1150 Revision 10, dated 04 Aug. 2006, or further revisions approved by ANAC, with the restrictions imposed by that document.*